

Amendments To The Claims:

Please amend the claims as shown.

1 – 25 (canceled)

26. (previously presented) A temperature resistant layered structure, comprising:
a substrate formed of metallic or ceramic material; and
a porous layer arranged on the substrate with an outer surface spaced away from the substrate, and having a plurality of pores formed therein with each pore defined by a wall, and a ceramic coating on an interior surface of the wall, the porous layer characterized by sizes of the pores decreasing as the layer extends toward the outer surface.

27. (previously presented) The layered structure of claim 26, wherein the layered structure is exposed to a temperature between 1000°C and 1600 °C.

28. (canceled)

29. (previously presented) The layered structure as claimed in claim 26, wherein the porous layer is in a foam or a sponge form.

30. (previously presented) The layered structure as claimed in claim 26, further comprising an intermediate layer interposed between the substrate and the porous layer.

31. (canceled)

32. (previously presented) The layered structure as claimed in claim 26, wherein the substrate and the porous layer comprise different materials.

33. (previously presented) The layered structure as claimed in claim 26, wherein the porous layer has a plurality of pores, each pore having the ceramic coating on the interior surface of the wall.

34. (previously presented) The layered structure as claimed in claim 26, wherein a ceramic coating is arranged on a surface region of the porous layer that is in contact with a hot working medium.

35. (canceled).

36. (previously presented) The layered structure as claimed in claim 26, wherein the porous layer is soldered, welded or adhesively bonded to the substrate, and the ceramic coating is applied to the pore by dip-coating, layer build-up or plasma spraying.

37 – 45 (canceled)

46. (currently amended) A temperature resistant layered structure, comprising:

a substrate formed of metallic or ceramic material; and

a porous layer arranged on the substrate with an outer surface spaced away from the substrate, and having a plurality of pores formed therein with each pore defined by a wall, and a ceramic coating on an interior surface of the wall, wherein the ceramic coating is ZrO_2 , or Y_2O_3 - ZrO_2 , the porous layer characterized by sizes of the pores decreasing as the layer extends toward the outer surface.

47. (previously presented) A temperature resistant layered structure, comprising:
a substrate formed of metallic or ceramic material; and
a porous layer arranged on the substrate with an outer surface spaced away from the substrate, and having a plurality of pores formed therein with each pore defined by a wall, and a ceramic coating on an interior surface of the wall, and wherein the porous layer comprises MCrAlX, where M is selected from the group consisting of iron, cobalt or nickel, and X is the element yttrium and/or a rare earth element.